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(54) **PRODUCTION OF HIGH STRENGTH
SEAMLESS STEEL PIPE EXCELLENT IN
SULFIDE STRESS CRACKING RESISTANCE**

(57) Abstract:

PURPOSE: To provide a method for producing a seamless steel pipe having high sulfide stress cracking resistance, high strength and high toughness using a direct hardening method.

CONSTITUTION: This is a method for producing a high strength seamless steel pipe excellent in sulfide stress cracking resistance in which, at the time of producing a seamless steel pipe by subjecting a billet having a prescribed chemical compsn. and satisfy-

ing $Ti(\%)-(48/14)\{N(\%)-(14/91)Zr(\%)\} > 0$ to hot piercing and rolling, in succession to piercing, finish rolling of $\geq 40\%$ cross sectional compressibility is executed at 800 to 1050°C finishing temp., after that, reheating is executed at a temp. $T(^{\circ}C)$ in the temp. range of 850 to 1100°C for time $t(h)$ to regulate the value of $(T+273)(21+\log t)$ to 23500 to 26000, immediately, direct hardening is executed, and next, tempering is executed at the Ac_1 point or below. In the case the piercing is executed by a cross piercing machine or the contents of P and S in impurities are reduced, the effects are high. When reheating hardening is executed after the direct hardening, the effects are moreover high.

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